# EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|---|---|---|---|---|---|---|
| L1 | 4 | "6806268".pn. | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 16:44 |
| L2 | 176 | ((advance or advanced) adj2 (glycosylation or glycosylated ) adj2 (end adj product)) | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 16:49 |
| L3 | 21 | l2 and (opthalmic or glaucoma) | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 16:53 |
| L4 | 59 | cross-linking adj inhibition | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 16:53 |
| L5 | 118488 | cross-linking | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 16:54 |
| L6 | 2043 | l5 and glaucoma | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 16:53 |
| L7 | 22 | l2 and (intraocular) | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 18:51 |
| L8 | 5177 | l5 and intraocular | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 16:55 |
| L9 | 28 | l8 and sugar-derived | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 17:10 |
| L10 | 1881 | cerami | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 17:10 |
| L11 | 0 | l10 and thiazolijm | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 17:10 |
| L12 | 48 | l10 and thiazolium | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 17:12 |
| L13 | 33 | l12 and (conjunction or combination) | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 17:12 |
| L14 | 4 | improving adj ocular adj accomodation | US-PGPUB; USPAT; DERWENT | OR | OFF | 2007/10/14 18:51 |

1: Exp Eye Res. 1999 Mar;68(3):361-6.



# Relationship between autofluorescence and advanced glycation end products in diabetic lenses.

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Autofluorescence and advanced glycation end product (AGE) levels were measured in the lenses of 9 diabetic Chinese hamsters and 6 age-matched controls. Lens autofluorescence also was measured in 37 diabetic patients and 14 age-matched controls. Lens autofluorescence values were measured noninvasively with a lens measurement system using color filters with peak transmission at 365- and 434-nm wavelengths (excitation and emission, respectively) that are characteristic of AGE fluorescence. The peak lens autofluorescence level was used as the lens autofluorescence value, and the mean lens autofluorescence values from both eyes of each subject were used for statistical analysis. The AGE levels in one lens from each hamster were measured by noncompetitive enzyme-linked immunosorbent assay with a polyclonal anti-AGE antibody. We found a 2.2 times increase of the mean lens autofluorescence value of diabetic hamsters in comparison with that of controls ($P<0.01$). We also found a 1.5 times increase of the mean AGE level from the lenses of diabetic hamsters in comparison with that of controls ($P<0.01$). Moreover, a statistically significant positive correlation between the AGE level and autofluorescence value in the same lenses was observed in all hamsters ($rho=0.58$, $P<0.05$). In human subjects, we found a 1.4 times increase of the mean lens autofluorescence value of diabetic patients in comparison with that of age-matched controls ($P<0.01$). Our results suggest that non invasive measurement of lens autofluorescence may be a guide to AGE levels in lenses.


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1: Diabetes Care. 2001 Mar;24(3):479-82.



# Corneal advanced glycation end products increase in patients with proliferative diabetic retinopathy.

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OBJECTIVE: To evaluate corneal advanced glycation end product (AGE) fluorescence in patients with diabetes and in healthy control subjects. RESEARCH DESIGN AND METHODS: Corneal autofluorescence was measured in 26 eyes of 26 patients with type 2 diabetes (mean age 57.0 years; mean disease duration 12.2 years; mean HbA1c 7.1%) and 13 eyes of 13 healthy age-matched control subjects (mean age 57.9 years). The patients with type 2 diabetes were divided into the following groups: patients without diabetic retinopathy (DR), patients without proliferative diabetic retinopathy (PDR), and patients with PDR. Corneal autofluorescence was measured by fluorophotometry with the wavelength that is characteristic of AGE fluorescence (excitation and emission 360-370 nm and 430-450 nm, respectively). We defined peak corneal autofluorescence levels as corneal AGE fluorescence values. We compared the corneal AGE fluorescence values in the four groups. RESULTS: In the PDR group (11.9 +/- 3.9 arbitrary units [mean +/- SD]), the corneal AGE fluorescence values were significantly higher compared with the control subjects (6.9 +/- 1.3 arbitrary units), the patients without DR (7.4 +/- 2.1 arbitrary units), and the patients without PDR (6.9 +/- 2.2 arbitrary units) ($P < 0.05$). CONCLUSIONS: We found that corneal AGEs may increase in patients with diabetes and PDR compared with control subjects, patients without DR, and patients without PDR. In the patients with PDR, increased corneal AGEs may play a role in diabetic keratopathy.

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